

# The Urban World

Quarterly Publication



**RCUES**  
Mumbai

Regional Centre for Urban and Environmental Studies  
All India Institute of Local Self-Government, Mumbai



## **Regional Centre for Urban & Environmental Studies (RCUES), Mumbai** (Fully supported by Ministry of Housing and Urban Affairs, Government of India)

Established in 1926, the All India Institute of Local Self Government (AIILSG), India is a premier autonomous research and training institution in India. The Institute was recognized as an Educational Institution by Government of Maharashtra in the year 1971. The Institute offers several regular training courses in urban development management and municipal administration, which are recognized by the Government of India and several State Governments in India.

In the year 1968, the Ministry of Housing and Urban Affairs (MoHUA), earlier Ministry of Urban Development), Government of India (GoI) established the Regional Centre for Urban & Environmental Studies (RCUES) at AIILSG, Mumbai to undertake urban policy research, technical advisory services, and building work capabilities of municipal officials and elected members from the States of Goa, Gujarat, Maharashtra, Rajasthan and UTs of Diu, Daman, Dadra & Nagar Haveli. The Ministry of Housing and Urban Affairs (MoHUA), Government of India added States of Assam and Tripura from February, 2012 and Lakshadweep from August 2017 to the domain of RCUES of AIILSG, Mumbai. The RCUES is supported by the MoHUA, Government of India. The MoHUA, Government of India has formed National Review and Monitoring Committee for RCUES under the chairmanship of the Secretary, MoHUA, Government of India. The Principal Secretary, Urban Development Department, Government of Maharashtra is the ex-officio Chairperson of the Advisory Committee of the RCUES, Mumbai, which is constituted by MoHUA, Government of India.

The RCUES was recognized by the Ministry of Urban Development, Government of India as a National Training Institute (NTI) to undertake capacity building of project functionary, municipal officials, and municipal elected members under the earlier urban poverty alleviation programme-UBSP. The RCUES was also recognized as a Nodal Resource Centre on SJSRY (NRCS) and Nodal Resource Centre (NRC) for RAY by Ministry of Housing and Urban Poverty Alleviation, Government of India.

The AIILSG, Mumbai houses the Solid Waste Management (SWM) Cell backed by the Government of Maharashtra for capacity building of municipal bodies and provide technical advisory services to ULBs in the State. The Water Supply & Sanitation Department (WSSD), Government of Maharashtra (GoM) established Change Management Unit (CMU) in AIILSG, Mumbai from 13th January, 2010 to 30th June, 2014 and also selected AIILSG, Mumbai as a Nodal Agency in preparation of City Sanitation Plans for 19 Municipal Corporations and 15 A Class Municipal Councils in Maharashtra State, under the assistance of Ministry of Urban Development, Government of India. The WSSD, GoM also established Waste Management & Research Centre in AIILSG, Mumbai, supported by Government of Maharashtra and MMRDA.

In August, 2013 Ministry of Urban Development, Government of India empanelled the AIILSG, Mumbai as Agency for providing technical support to the Cities / Towns of States / Urban Local Bodies (ULBs) in the field of Water Supply and Sanitation, Sewerage and Drainage systems.

In July 2015, Ministry of Urban Development, Government of India empanelled the RCUES & AIILSG, Mumbai an Agency for technical support in Municipal Solid Waste Management under Swachh Bharat Mission (SBM) programmes.

In February, 2016, Ministry of Housing and Urban Poverty Alleviation, Government of India empanelled the RCUES of AIILSG, Mumbai for conducting training and capacity building programme for experts of SMMU, CMMUs, COs, Key Officials and other stakeholders of the State and Urban Local Bodies (ULB) level under Deendayal Antyodaya Yojana – National Urban Livelihoods Mission (DAY – NULM).

In December, 2017, AIILSG has been empanelled as a training entity regarding implementation of new Integrated Capacity Building Programmes (ICBP) under Urban Missions, viz. Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Swachh Bharat Mission (SBM), Smart Cities Mission (SCM), National Urban Livelihoods Mission (NULM), Housing for All (HFA), Pradhan Mantri Awas Yojana (PMAY) and Heritage City Development and Augmentation Yojana (HRIDAY) for Elected Representatives and Municipal Functionaries.

At present, RCUES and AIILSG, Mumbai is involved in providing capacity building, research and technical support to number of State Governments and ULBs for implementing various urban development missions and programmes launched by the GoI.

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# Editorial

## Corona Pandemic- Spotlight on Public Healthcare

Numerous messages have been going out from political leaders, government officials, business leaders, spiritual leaders and other thinkers paying tributes to India's healthcare workers – doctors, nurses, paramedics and other staff who have been working tirelessly and selflessly, day in and day out, for the welfare of citizens during these trying times of the Corona Pandemic. These personnel are, on a daily basis, putting their lives and those of their families at risk of infection. We must all continue to laud their services to the nation and pray for their well-being.

This is also a time to take a look at India's healthcare system, more specifically its public healthcare system. The country has started to break free from the past which has been constrained by a weak public health system with less than robust delivery of services.

India's Government expenditure on health as percentage of GDP has crept up from 1.2 in FY14 to 1.4 in FY18 and 1.6 in FY20. The low expenditure compared to the global average of about 4 percent is likely due to the fact that Indian healthcare is largely dominated by the private sector, with about 65 percent of the population dependent on it.

Under the new National Health Policy (NHP) 2017 the plan is to push up expenditure to 2.5% of GDP by 2025. The Central outlay for health in Budget 2020-21 is about 69,000 crores. In addition to putting more money into the system, the government has undertaken some reform measures too. Indian health system is marked by very high 'out-of-pocket' expenditure on health. By some estimates, only about 20 percent of India's population is covered by insurance leaving the vast majority vulnerable to extreme financial hardship. WHO in an earlier estimate stated that out-of-pocket expenditures on health services push 100 million people into poverty each year. The Government has taken steps to correct this. In 2018, the Pradhan Mantri Jan Arogya Yojana was launched which aimed to insure 100 million families for Rs 5,00,000/- per family per year of health expenses. Another insurance scheme, Aarogya Sanjeevani has been launched since April this year which is mandatory for all health insurance companies to offer. These can be expected to transform the health system in our country.

The Corona Virus Pandemic has among others brought focus on the need for an effective public health system. Effective healthcare cannot just be a sympathetic concern for people, especially the poor. A robust public health system and the resultant benefits in terms of a healthy population will bolster economic growth and establish more just, fair, and equitable societies.

# Perceiving COVID-19 from a Gendered Lens: A Pandemic Still in Making

**Dr. Khevana Desai,**

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## Introduction

In these times when we, as a global community, witness a complete turnaround of our lives with each one trying differently to flatten the deadly curve of COVID-19, there have been some points of global consensus as well. One of the issues on which there is a consensus is on perceiving the 'world as flat' where pandemic is spreading equally across the spectrum beyond caste, race, class, gender, religion or ethnicity. As observed by scholars and social scientists, the virus doesn't discriminate. (Butler, 2020). There is also a consensus amongst the third world nations\* that the pandemic is proving to be one more way in which the rich capitalists (tourists from the first world) have caused more than their fair-share of harm to the poor in the third world. Although the corona virus is spreading across without being selective or discriminatory, the impact is surely different and discriminatory for different sections of societies, marginalized in general and gender in particular. "The pandemic is deepening pre-existing inequalities, exposing vulnerabilities in social, political and economic systems which are in turn amplifying the impacts of the pandemic. Across every sphere, from health to the economy, security to social protection, the impacts of COVID-19 are exacerbated for women and girls simply by virtue of their sex" (UN, 2020: 2). It is also observed that not just extent or spread of the pandemic but the impact of the pandemic also needs to be assessed

from a gendered perspective, which is grossly missing in most policy documents. "Policies and public health efforts have not addressed the gendered impacts of disease outbreaks" (Wenham, C, Smith, J. and Morgan, R., 2020: 846).

It is only in March 2020, when United Nations' women's wing (UN Women, 2020) and Human Rights departments (UN-Human Rights, 2020) initiated documentation of impact of COVID-19 on gender, that nation wise assessment and discourse began to emerge on online public platforms. This paper is a critical account of gender specific impact of COVID-19 and potential gender-specific changes in the post-COVID-19 societies. Indeed, it is early to arrive at conclusions till the pandemic is completely under control and its after effects are also visible, the early trends and challenges that are experienced by women as a group need to be assessed and prioritized in policy making.

## Rationale and Objective

Pandemics in history, especially in last century, have been assessed for their scientific, medical or pharmaceutical, political, economic and ecological impacts. They were seldom studied from a socio-cultural or gendered perspective. Pandemics not only impact women differently, their contribution as a frontline helpers or professionals is also discredited during those times, as often done in other historical events. The socio-economic changes during pandemic in



general, and COVID-19 in particular have been faced and will be affecting women differently. A lacuna in pre-existing data on the same, makes it difficult for policy makers to find a way forward or mitigate its gender specific ill effects. The paper is an attempt to bridge this gap, and provide an insight into the gender specific perspective of differential impacts of COVID-19. The paper argues that in post-pandemic era there is a need for re-conceptualization and revisiting the idea of gendered division of labour and 'care work', the notion of 'helping' the wife or mother in household chores, home as a 'safe' domain and immediate attention to challenges like marginalization and informalisation of women's work, prioritising inclusive, gender-just health and medical policies.

### **Perceiving Pandemic from a Gendered Lens**

To begin with it is imperative to understand the basic difference in the widely used terms like epidemics and pandemics. “An epidemic is generally considered to be an unexpected, widespread rise in disease incidence at a given time. A pandemic is best thought of as a very large epidemic. Ebola in 2014 was by any measure an epidemic— perhaps even a pandemic. The influenza (Spanish flu) that killed fifty million people around the world in 1918 was a pandemic. National Institutes of Health (NIH) came up with a broad framework that can work to help define what a pandemic is and has been. They suggested that it must meet eight criteria: wide geographic extension, disease movement, high attack rates and explosiveness, minimal population immunity, novelty, infectiousness, contagiousness, and severity” (McMillan, C. 2016: 1-2). COVID-19 caused by Coronavirus absolutely adhered to all the criteria and hence, qualifies as a 'Pandemic' as declared by WHO on 12<sup>th</sup> March 2020.

The uniqueness of the virus and its spread occurs from its unusual emergence, pace and extent. Unlike most other pandemics so far, where the

social conditions of poverty and disease went hand-in-hand (ibid: 3-4), COVID-19 emerged and spread in the first phase in developed, rich, first world nations. Now, that it has spread in almost the entire world, a critical and cross sectional study is required to assess its socio-economic impact across nations. Pandemics in general, like any other crisis, are gender specific and hence, social in its orientation. (Godderis, R. and Rossiter, K, 2013: 134). Though not necessarily in terms of its spread but more in terms of its impact or influence.

Science, as a source of knowledge, has inevitably been masculine (Poonacha, V., 2010). Pandemic, as a health emergency or a medical disaster is viewed and tackled within scientific infrastructure, taking it beyond the purview of socio-ethical arena. Science owing to its masculine nature often fails to perceive a phenomenon or its impact from a women's perspective. Woman, neither be considered as an important stake holder in planning the road ahead in the times of pandemic, nor is she seen as a specific marginalised category affected by the pandemic.

A similar or rather more intensive ignorance is witnessed while framing policies for and assessing impacts of COVID-19. In fact, there have been systematic and widespread oppositions by feminist scholars and activists against this absence of feminist standpoint and awareness campaigns to bring the voices of women in the forefront. A larger philosophical argument is also made wherein feminists like Enloe (2020) critically question the use of military terms like 'war' while fighting Corona worldwide. War has always been anti-women, anti-human and against justice. For her “feminist investigators have taught us repeatedly – that in myriad countries and across generations war waging has fuelled sexism, racism, homophobia, autocracy, secrecy and xenophobia. None of those will prevent a pandemic...As anti-militarist feminists thinking about how best to address the serious global and local challenges presented by the

coronavirus, we try to craft approaches that enhance social justice, gender equity, and sustainable peace. We may imagine that inspiring triad is the polar opposite of war waging” (Enloe, 2020:1)

On pragmatic front, COVID-19, is proven to have exacerbated and far reaching impact on women's socio-economic life, basic health rights and access to safety and protection. (UN, 2020). The basic areas of concerns, challenges for women and threat to her rights are:

- Economic recession, breakdown especially in informal sectors and downsizing during lockdowns and in post-pandemic period
- Increasing burden of care work in the house, further devaluation of unpaid work by women including the challenges of managing water and sanitation in the poor household or homeless families
- Increasing numbers and extent of domestic violence, intimate partner violence and abuses, lack of access to protection mechanism
- Discrediting the contribution of women health personnel and other medical aides and the risk involved as a front line health worker
- Access to reproductive or sexual health care

### **Breakdown of Informal Economies**

The biggest and immediate potential threat during and after the pandemic is global economic crises. Women forming a major part of service industry and informal economy across the globe are at a bigger risk of facing the brunt. “The pandemic is moving beyond a global health crisis and morphing into a labour market, social, and economic crisis, posing a serious threat to women's employment and livelihoods, especially in precarious informal and non-essential sectors”. (UN, 2020). The industries

and sectors that will be worst affected are hospitality, hotel, entertainment, tourism and media industry. “The current crisis has a big impact on service occupations with high female employment shares, such as restaurants and hospitality”. (Alon, T. et al, 2020: 1). The worst hit amongst them are going to be “women and girls who are generally earning less, saving less, and holding insecure jobs or living close to poverty”. (UN, 2020: 2). Female headed households are also going to be further pushed close to poverty lines.

Globally, women represent 55.8% of employees in service industries, while in the G7, women make up around 88% of the service industry workforce. The situation is worse in developing economies where the vast majority of women's employment – 70 percent – is in the informal economy with few protections against dismissal or for paid sick leave and limited access to social protection. To earn a living these workers often depend on public space and social interactions, which are now being restricted to contain the spread of the pandemic. (UN, 2020: 4). In non-essential sectors like tourism and hospitality, in the struggle by owners to stay in the business there has been large scale layoffs and pay cuts. In the European Union, about 25% of women employees are in precarious jobs. (WEPS, 2020: 1). According to the British government's figures, 40 percent of employed women work part-time, compared with only 13 percent of men. In heterosexual relationships, women are more likely to be the lower earners, meaning their jobs are considered a lower priority when disruptions come along. (Lewis, H, 2020). The worst hit are going to be women migrant workers or female members of migrant families where shelter, employment or rather the very survival is at stake.

There are still a considerable number of members in sex trade and members of transgender or sexual minority groups who are going to be adversely hit by the extended and uncertain duration of lockdown. The policy documents across the globe widely

ignore or marginalise these people and their daily needs. The moral stigma attached to them or their profession by the wider society further make them vulnerable in accessing the help provided by civil society organisations.

### **Unequal Division of Labour in the Household and Unpaid Care Work**

Globally women work for longer hours and shoulder more responsibilities in the household. Before COVID-19 became a global pandemic, women were doing three times as much unpaid care and domestic work as men. This unseen economy has real impacts on the formal economy, and women's lives. In Latin America the value of unpaid work is estimated to represent between 15.2 percent (Ecuador) and 25.3 percent (Costa Rica) of GDP (UN, 2020: 6). Care work is, in fact, unbalanced — even among highly educated couples. Women devote significantly more time to household work than do men. When married mothers and fathers in the United States are compared, the former spend almost twice as much time on housework and childcare. In the gender-egalitarian countries of northern Europe, women still do almost two-thirds of the unpaid work. Even among heterosexual couples with female breadwinners, women do most of the care work. (Minello, A. 2020).

The pandemic has dramatically increased the need for childcare globally and for domestic work in affluent and middle class households in the third world, where the concept of domestic help, top servant, full time maid exist widely. In addition, grandparent-provided childcare is now discouraged due to the higher mortality rate for the elderly, and given social distancing measures, sharing childcare with neighbors and friends is also very limited. Thus, most families have no choice but to take care of their kids themselves. “In Asia, women already spend 4.1 times more of their time on unpaid care work than men. Men across the

region spend on average one hour per day on unpaid care work, and just half an hour in India and Pakistan. Under lockdown conditions, in addition to childcare and household chores, women are now confronted with additional responsibilities such as home schooling, more intense care of the sick, and community care (Patel and Goenlists, 2020: 1).

Based on the existing distribution of child care duties in most families, mothers are likely to be more affected than fathers. Single mothers, of which there are many in the United States, and who are often in a disadvantaged economic position to begin with, will take the biggest hit. (Alon, T. et al, 2020: 1). With children out of school (earlier looked after by grandparents, neighbor or help) and elderly who are at home the entire day, it is observed widely that women academicians and researchers are unable to do scientific research work or submit research papers for publication. (Minello, A. 2020). Work from home (WFH) for women in academia or corporate world with additional household burden is taking a toll on their professional careers and/or mental stability, adding stress to an already stressful situation owing to the pandemic.

In the underdeveloped and developing third world countries, especially in the marginalised families, sanitation and hygiene in the family is women's purview and insistence on personal hygiene and washing hands means additional burden of collecting more water on women in the households especially in the slums in developing nations where water connectivity is still a distant dream. For instance, 35% of population in Maharashtra do not have water connections in their houses. (Jani, G., 2020). In such a situation insistence on frequent hand washing only leads to additional burden on women to collect more water.

Amongst the affluent families of South Asia, particularly India, men contributing in the household chores is considered to be a remarkable

event. Social media is bursting with videos and pictures of men and young boys in India 'helping' their mothers, wives and sisters in the household chores. The Indian middle class and upper middle class families are completely dependent on housemaids or helps for their daily cooking and cleaning. In this time of crisis, as per the cultural construct and division of labour the entire burden shifts to the women of the house. The 'kind' and 'concerned' men are pitching in. Which surely paints a beautiful picture of equal division of work. But the idea still remains that of a 'help' reinforcing and essentialising the concept of 'household' work as originally 'her' work and 'he' is just helping her with her work. Also these pitching in are often seen as occasional outbursts of kindness and sometimes only to create a temporal social media sensation and often disappear in the long run. Continuous demands for good food by the male members and children in the family, just to kill the boredom, further augments women's drudgery.

### **'HOME' as a Safe Space and Increasing Domestic Violence**

As the COVID-19 pandemic deepens economic and social stress coupled with restricted movement and social isolation measures, gender-based violence is increasing exponentially. Many women are being forced to 'lockdown' at home with their abusers at the same time that services to support survivors are being disrupted or made inaccessible. Crowded homes, substance abuse, limited access to services and reduced peer support are exacerbating these conditions. Before the pandemic, it was estimated that one in three women will experience violence during their lifetimes. Many of these women are now trapped in their homes with their abusers. (UN, 2020: 17). As per diverse media outlets, social media posts and women rights experts, different forms of on-line violence are on the rise including stalking, bullying, sexual harassment, and sex trolling. Examples include unsolicited pornographic videos while they are

dialing into a social event via a virtual chat room (UN Woman, 2020: 3)

Though limited precedent exists for the current crisis, we do find scenarios of rapidly increasing stress, sudden shifts in daily routines, the closing of schools and community resources, and a rapid decrease in available resources after natural disasters. Additionally, controlling behaviours (often a means of coping with trauma), unemployment, and limited access to social support systems have all been identified as family violence risk factors that also commonly occur after natural disasters. Studies that explore the impact of natural disasters on crime and violence report that while property crimes and other forms of violent crime may or may not be impacted, domestic violence reports often substantially increase after the catastrophic event. (Campbell, A. 2020)

Collapse in a coordinated response between different sectors, i.e., health, police and justice, and social services response, and social distancing will mean that sectors will be challenged to provide meaningful and relevant support to women and girls who are experiencing violence. (UN WOMEN, 2020: 4) Lack of coordination between health police and judiciary. Lack of access to resources to get in touch with helpline. Also, given the existing gender digital divide, women and girls in many countries, especially those who face multiple forms of discrimination, may not have access to a mobile phone, computer, or internet to access services or be able to safely use these at home as they may be closely monitored by the perpetrator and other family members (ibid). In such situations there is a need to revisit the idea of 'home' as a safe space for women and girls. The very notion of control, fear and exploitation makes home a 'prison' where the woman becomes a victim of policing, torture and surveillance. Seeking help from the peers, church/religious organizations or professional counselling centers or even escaping the 'prison' becomes difficult for her.



The early statistics from across the globe in the first few weeks of the lockdown period portray a devastating picture of domestic violence (DV) or Intimate partner violence (IPV). In France, for example, cases of domestic violence have increased by 30 percent since the lockdown on March 17. Helplines in Cyprus and Singapore have registered an increase in calls by 30 percent and 33 percent, respectively. In Argentina, emergency calls for domestic violence cases have increased by 25 percent since the lockdown started. In Canada, Germany, Spain, the United Kingdom, and the United States, government authorities, women's rights activists and civil society partners have indicated increasing reports of domestic violence during the crisis, and/or increased demand for emergency shelter. (UN WOMAN, 2020: 3). In India too, the situation is worrisome. Abhyam (181) helpline in Gujarat since 23<sup>rd</sup> March in Ahmedabad alone there were 261 calls (Gujarat Samachar, 2020: 1). Woman being brutally beaten up for mundane issues like winning a game of Ludo only reflects the gravity and gruesomeness of the problem. (Sirur, S. 2020). Children abuse, increase in the tendency to watch porn, incest rape are also reported to be on the rise. Further economic slowdown or recession may intensify the cases.

### **Discrediting the Front Line Health Workers**

Globally, women make up 70 percent of the health workforce and are more likely to be front-line health workers, especially nurses, midwives and community health workers. They are also the majority of health facility service-staff – such as cleaners, laundry, catering – and as such they are more likely to be exposed to the virus. In some areas, women have less access to personal protective equipment (PPE) or correctly sized equipment. (UN, 2020: 10). State Council Information Office in China suggests that more than 90% of health-care workers in Hubei province are women, emphasising the gendered nature of the health workforce and the risk that predominantly

female health workers incur. (Wenham, C, Smith, J. and Morgan, R. 2020: 846). In distribution or access to already scarce PPE, doctors and pathology staff (predominately males) are prioritised, pushing the women nurses and other health care staff to the bottom of the hierarchy and putting her at a higher risk or vulnerability to the virus infection.

This discrediting is historical and universally prevalent in the last century as well. “In her history of Canadian nursing practice Mc Pherson (1996: 15) notes that the nursing profession has always been guided by the gendered assumption that 'personal service tasks demanded in patient care were deemed natural for women to execute'. Evidence from the archival record indicates that this belief informed expectations of the duty to care in Brantford during the 1918 influenza pandemic, resulting in city leaders appealing to all female community members to volunteer as nurses to look after the ill” (Godderis, R. and Rossiter, K, 2013: 135). While women were expected to put themselves at great personal risk for the community, there was little recognition of, or support for, the healthcare work performed by women. Newspaper reports acknowledged the efforts and skills of male doctors and politicians, claiming that their knowledge and expertise proved crucial in guiding the city in the face of chaos. Yet the archival record shows that it was often highly trained, senior female nurses who were central to the management of emergency influenza services.

Even during the current pandemic, women health care professionals are rarely applauded and often taken for granted by the media or the government machinery. Of the total health care professionals affected by Corona virus, 72% and 66% are women in Spain and Italy respectively. The official numbers from India are yet to come, but a report from Mumbai hospitals suggested 40 nurses tested positive by the end of March, 2020 which was still 1<sup>st</sup> phase of the Pandemic. (Rajagopal, D. 2020)

## **Access to Reproductive and Sexual Health**

During any natural or manmade emergencies, health of the women generally is adversely impacted through the reallocation of resources and priorities, including sexual and reproductive health services. The worst affected are going to be women seeking abortions, pregnant women in different stages of pregnancy, neo-natal mothers, HIV infected sex workers and menstruating girls and women.

The access is further hindered by multiple or intersecting inequalities, such as ethnicity, socioeconomic status, disability, age, race, geographic location and sexual orientation, among others which influences access and decision-making to critical health services and information about COVID-19. Women and girls have unique health needs, but they are less likely to have access to quality health services, essential medicines and vaccines, maternal and reproductive health care, or insurance coverage for routine and catastrophic health costs, especially in rural and marginalized communities.

In Latin America and the Caribbean, it is estimated that an additional 18 million women will lose regular access to modern contraceptives, given the current context of COVID-19 Pandemic. (UN, 2020: 10). During the Zika virus outbreak, differences in power between men and women meant that women did not have autonomy over their sexual and reproductive lives, which was compounded by their inadequate access to health care and insufficient financial resources to travel to hospitals for check-ups for their children, despite women doing most of the community vector control activities. (Wenham C, Arevalo A, Coast E, 2019). In India, in view of lockdown only supply of essential medical items and groceries is permitted. Supply of sanitary pads, not being considered as an essential item, may get hampered. Its unavailability or scarcity will further adversely affect 340 million menstruating female population of the country.

## **Way Forward and Recommendation**

Taking serious note of the urgency of the need to address and prioritize the above mentioned challenges of women amidst corona, globally there have been recommendations, guidelines and policy decisions. These by and large are directives by the global and national authorities or demand charters by civil society organizations.

### **1. Women in Decision Making**

In the world's fight against coronavirus, female leaders of several countries have proven to be effective and compassionate decision makers. Germany, Denmark, New Zealand and Taiwan show that elected leaders can operate effectively without the twin crutches of disinformation and demonization of the crisis. 89 percent of Germans said the government under the leadership of Ms. Merkel was handling it well. In Finland, New Zealand, Denmark, Norway and Taiwan, elected female leaders have meticulously hindered a crisis that has killed thousands in otherwise developed nations. A poll suggested that 88 percent of New Zealanders trusted decisions taken by Arden's government to tackle the coronavirus pandemic. On the metric of the government dealing successfully with "national problems", Ardern scored 83 percent, a jump from 59 percent in a similar poll last month. (Tiwari, A, 2020: 1-2). There has also been a recommendation that women's organizations who are often on the front line of response in communities should also be represented and supported in the decision making at every level.

### **2. Sex Segregated Economic Disbursement Packages in Informal Sector and Service Sector**

Sectors where women are a large proportion of workers, and where supply chains have been disrupted, should have adequate access to credit, loans, and grants so they can retain the female



work force. Similarly, disbursement procedures need to take into account women and girls' care obligations and possible informal status in their employment to make benefits accessible to them. In South Asia, over 80 percent of women in non-agricultural jobs are in informal employment; in sub-Saharan Africa this figure is 74 percent; and in Latin America and the Caribbean 54 percent of women in non-agricultural jobs participate in informal employment. Access to benefits such as health insurance, paid sick and maternity leave, pensions and unemployment benefits need to reach beyond formal employment and be accessible to women in all spheres of work. (UN, 2020: 5).

There was also a recommendation for increase in the provision for number of days in Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) and ensure its implementation in all rural areas; special cash transfers to single women or women headed households in which partners or breadwinners have not made it back home due to lock down; facilitating Self Help Groups, informal sector workers to make soap, sanitizers, masks etc. on a large scale; providing cooked meals to children as part of midday meal scheme, etc.

### **3. Controlling and Mitigating Domestic Violence**

As directed by UN, all countries, state wise/ at local level, will have to make a plan of action and implement to the immediate effect to mitigate the extent and prevalence of domestic violence. Domestic violence shelters are to be deemed as essential services and must remain open during the lockdown.

In China the hashtag #AntiDomesticViolence DuringEpidemic has taken off as part of advocacy with links to online resources - helping to break the silence and expose violence as a risk during lockdown. Online and mobile

service providers are taking steps to deliver support such as free calls to helplines in Antigua and Barbuda. In Spain, an instant messaging service with a geolocation function offers an online chat room that provides immediate psychological support to survivors of violence. In Argentina, pharmacies have been declared safe spaces for victims of abuse to report. Similarly, in France, grocery stores are housing pop-up-services and 20,000 hotel room nights have been made available to women needing shelter from abusive situations. In Colombia the government has guaranteed continued access to virtual gender-based violence services, including legal advice, psychosocial advice, police and justice services, including hearings. (UN, 2020:18). In India too efforts are being made by National Commission for Women to provide a special helpline and activate the one stop crises centers to provide help and shelter to women in distress.

### **4. Special Care for Frontline Health Workers**

Ensuring delivery of reproductive health services, contraceptives, menstrual health supplies and maternal health care. Ensure that all pregnant women with a suspected, probable or confirmed COVID-19 infection continue to have access to the full range of quality health care. Ensuring availability of curfew passes for family members of the pregnant women. Make provision of 90 days of wages to all pregnant from 3<sup>rd</sup> trimester and lactating women with infants aged less than 6 months. Ensuring all ASHA workers, Anganwadi workers and FHWs at the village level are provided with proper Personal Protective Equipment (PPE), social security and timely remuneration.

### **5. Food Security, Water and Sanitation**

There is a recommendation to support panchayats and local groups for organizing regular water supply to every household in order

to avoid women and girls congregating at the village water source for bathing, washing and fetching drinking water. Ensuring delivery of LPG gas cylinders to households in villages. Ensuring most marginalized transgender community does not face exclusion and is provided ration under PDS schemes; housing to those who are homeless and other medical facilities.

## Conclusion

Gender discrimination, just like pandemic, occurs, reoccurs and exists for long. The inequalities have only further intensified or have become discernable in the pandemic era. Lack of documentation of gendered impact of pandemic historically creates

more challenges for the way forward. COVID-19 questions the very notions and conditions of home, safety, care work, informal work and migrant population. It further discriminates women based on intersectionality of her socio-economic location, geography, age, religion and sexual orientation. COVID-19 is expected to change the world drastically for better or worse. It has already challenged the capitalist economies, private health infrastructures, social interactions and relations and unsustainable models of developments. To gain a holistic understanding of impact of this pandemic, it will be important to apply an intentional gender lens to the design of socio-economic programs and policies undertaken to achieve greater equality, opportunities, and social protection.

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# Dynamics of High-Rise Buildings in Indian Cities: Case of Mumbai

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## Abstract

Promoting city's image through high rise building is an art which helps the city to reach a higher status in the global economy. So many countries encourage preparation of comprehensive plans to establish high-rise investment projects to prove its economic power and prestige globally. This paper made an attempt to understand the development of high-rise building across the Indian cities. Their height, functions and regulatory measures for high-rise buildings are also analyzed. It is evident from the analysis that all the class one cities are not experiencing higher growth rather very few Indian cities have higher vertical growth compare to the other. Over the last 30 years periods the average height of the building has increased across all the selected cities. Mumbai's experience shows that changing regulatory measures are significant for accelerate the higher vertical growth. There is a major shift from commercial space development to residential space development.

**Keywords:** High Rise Building, Vertical Growth, Residential Space, Commercial Space

## Introduction

There was a big change in this world in the last century. One of which is a significant increase in the number of urban population as compared to the population in the rural areas. Based on United Nations (UN, 2014), by 2050, about 66% of the

world population is projected to be in urban. Increasing number of urban population have a significantly related to increasing the number of megacities in the world. Burns (1981) described this urbanization into two different stages. The first stage of urban growth is perhaps best analyzed as a period of intensive expansion within well-defined boundaries. In contrast, suburbanization, which has started for most cities become widespread in unincorporated rural areas and was simultaneously less dependent on any single urban center and the distinction between urban and rural was reduced. Presently India's urbanization character has been changing rapidly. One of the major changes is the higher growth of urban population and their concentration in the tier I cities. To accommodate this huge population there is growth of high-rise buildings. There is another emerging trend of growing neo-middle-class in urban India which aspires to live in better standard of living. They are also one of the major players of the housing sector in India. Demand for residential space among middle-class population is so high that residential segment contributes nearly 80 percent to the overall real-estate development in the country (Knight Frank, 2019). However, the growth of the high-rise buildings is not uniform across the various cities in India. They are concentrated in some of the urban areas in India. So this paper made an attempt to understand the spatial growth and dynamics of high-rise buildings and their driving forces across the various Indian cities.



## Conceptualizing 'High Rise Building' and its Development

Promoting city's image through high rise building is an art which helps the city to reach a higher status in the global economy. This image of a city is modern from Heidegger perspective; it is believed that basic process of modern times is to 'conquest the world as picture'. So creation of exclusive image<sup>1</sup> of a city in this globalized world is significant, not only to promote itself but to compete with the other city and achieve a higher status in the network of global economy (Lai, 2014). So many countries encourage preparation of comprehensive plans to establish high-rise investment projects to prove its economic power and prestige globally. High rise buildings have always fascinated the minds of people since the ancient times. The construction of such buildings began in the ancient times for defensive purposes or religious purposes (roman temples and churches). In the modern era, construction of such project began in the late nineteenth century for the purpose of either residential or administrative, and then it became to meet the requirements of hotels and other touristic needs as well. The term high rise does not have any internationally agreed definitions. However, a high-rise building can be defined from different perspectives. "Any structure where the height can have a serious impact on evacuation" is a high rise building as stated in the international conference of fire safety on high rise building (Craighead, 2009). "Generally, a high-rise structure is considered to be one that extends higher than the maximum reach of available fire-fighting equipment. In absolute numbers, this has been set variously between 75 feet (23 meters) and 100 feet (30 meters), " five or about seven to ten stories (depending on the slab-to-slab distance between floors). The International Building Code (IBC 2006) and the Building Construction and Safety Code, define high-rise buildings as buildings 75 feet or above in height measured from the lowest level of fire department

vehicle access (IBC, 2006). This height parameter has changed in the latter publication of IBC.

Generally, in terms of height, buildings between 23m (about six storeys) and 150m are considered high-rises. Buildings taller than 150m are classified as skyscrapers while those above 300m are considered supertall buildings (Ali and Armstrong, 1995). The Council on Tall Buildings and Urban Habitat (CTBUH) developed the international standards for measuring and defining tall buildings. They grouped tall building in two categories as 'supertall' and 'megatall' buildings. A "super-tall" is a tall building 300 meters (984 feet) or taller, and a "mega-tall" is a tall building 600 meters (1,968 feet) or taller. As of 2018, there are 149 Super-tall and only 3 Mega-tall building completed globally. In India each city (mainly metropolitan and sometime satellite town) defines height limit for their high rise building through building act. Like in Mumbai a high rise building is buildings up to a height of 120 meters, or about 40 floors. Kolkata Municipal Corporation building rules 2009 did not mention the term high-rise building but emphasizes about requirement of open space for high-rise residential building with 80 meter height or above.

There are many reasons to establish a high-rise building investment project. It includes rapid growth of population in cities, and therefore the constant pressure of the limited land area affected the evolution of building, higher land values, restriction of random growth in major cities adjacent to agricultural land and the high cost of setting up infrastructure for new cities and expression of progress. In the post-war years between 1950 and 1971, many cities around the world saw the high-rises as symbolizing "a new world", providing the ultimate way of living, equitable and healthy housing at high densities. Many local authorities in United Kingdom, including Birmingham, Sheffield and Glasgow promoted high-rises in their housing policy (Glendinning and Muthesius, 1994). As the world's

urban growth continues indications seem to converge towards a continued revival of high-rises, and its celebration as a symbol of affluent modern lifestyle (Lacayo, 2004). Following the paths of USA and Europe many developing countries in Asia constructs high-rise buildings. In fact, developing countries are eclipsing the US and Europe in the "mega-tall" category of 600-metre-plus buildings fuelled by faster economic growth and a desire to show off their wealth (ET, 2012). With the changing images of high-rises in Indian cities, how much do we really understand about this urban phenomenon? Unfortunately, the answer is not much. Research is necessary to illuminate its multiple aspects and inform future policy.

### **Vertical Urbanization and High Rise Building**

Vertical urbanization is increasingly universal in cities, and this development has not followed a single universal pattern. Vertical expansion is neither linear nor uniform in its scale, its target neighbourhood types, nor in its design. It ranges from sublime 'starchitect'-designed skyscrapers to generic tower blocks. High-rise housing is often associated with rapid urbanization and ecological sustainability, however its drivers are not always obvious and behind each city's vertical growth lays different stories. In the 21<sup>st</sup> century urban studies largely focuses on the analysis of cities horizontal expansion and producing theoretical frameworks primarily based on rapid global urban expansion. However, a dedicated strand of research largely concentrated to vertical expansion in urban studies for quite some time (McNeill 2005; Graham 2016). So, the study of vertical urbanization is far from new. Historically urban scholars have emphasized the vertical urbanization in multiple compelling ways, via various schools of thought and less specific concepts, such as intensification, densification and compact city (Karmakar, Chatterjee and Basu, 2018). It is imperative to note that first predominant explanations for rising

skylines have centered on the politics of urban planning and design, including planning reform and the power of vested interests. A second line of inquiry focuses on architectural, technological, and structural innovations, questions of style and culture, and the role of architects and their clients, and has included the traditional architectural canon focused on towers' symbolic value as artistic objects. Recent extraordinary rise of city skylines makes the expression 'vertical urbanization' in prominence in urban studies to explain contemporary economic turmoil. Hence, this 'vertical turn' in urban studies calls upon scholars to attend to the 'verticalising' urban topography and volumetric profiles of cities (McNeill 2005; Graham and Hewitt 2012; Harris 2015; Graham 2016).

In this part I have tried to provide some empirical analyses from urban planning including accounts of the shifting imaginaries of urban development. It incorporates the perspectives, the evolving symbolic landscapes and dynamics of vertical urbanization in capitalist economy (Glasgow: McCall and Mooney 2018). However, there is very little effort to position rising skylines within the capitalist political economy and the dynamics of capital circulation through the built environment (Craggs 2018). Aalbers and Christophers' (2014) recent work on theorization of housing's functions in political economy provides key theoretical grounding and insight about growth of high-rise buildings. The financial forces behind rising skylines do not demote alternative perspectives but rather steps towards integrating these within a fuller conceptual schema of vertical urbanization. A framework in which time and place specific explanations of vertical expansion can be embedded, and it can enhance communication between studies of local occurrences, as related yet locally contingent phenomena of contemporary capitalist political economy. For instance, Willis (1995) underscores the force of credit as the *raison d'être* for skyscraper proliferation in different



places and times. He documented how bond houses provided funds for the full cost of construction and accepted higher risk projects. The bonds system performed smoothly while demand for new offices 'remained steady and the number of new buildings was moderate.' Weber and Craggs (2015) likewise emphasized the power of credit lines in rising skylines. They concluded that 'capital supply drove [Chicago's] building boom' and particularly the 'easy availability of cheap credit and equity'. Weber's views on overbuilding as an 'intrinsic result of the speculative excess at the root of capitalist production and credit system' and not, as mainstream economists assert, 'an occasional aberration'.

Moreover, urban scholars' underscores post-1980s shifts, including the increasing importance of 'property capital', the specific originators of credit and growing surplus capital for understanding the vertical growth of cities (Craggs, 2018). Weber (2015) describes how banks and investment funds, encourages by regulatory liberalization, new financial instruments, and surplus global capital financed hundreds of millions of square feet of commercial stock 'that inflates property values and sustained the Millennial Boom.'

So, scholars' points out that the timing of vertical expansion is neither random nor incidental. Willis (1995) distinguishes 'standard conditions' from 'boom behaviour' occurring within a cyclical pattern. Building height is asserted to represent a 'barometer of a boom' on the basis that as land prices raise so too does 'economic height'—the 'number of storeys needed to spread the costs of the lot' (Willis 1995,). The theory that the tallest building typically appears at the end of the boom cycle and foreshadows economic crisis was popularized soon after in the so-called 'skyscraper index'. This theory was corroborated by Willis' data; it cannot explain why contemporary vertical expansion is now sometimes occurring concurrently with conditions of economic turmoil. In architecture and engineering sciences, attention is focused on the

supposed environmental sustainability of towers, envisioned as multifunctional, self-sufficient and green (Yeang, 1996; Ferrier, 2007), with no consideration of their politics. On the reverse, the study of the urban volume in urbanism and of the landscape stakes of the material transformations of cities gone with few economic considerations (McNeill, 2002; Tavernor, 2007); such studies mostly focused on the strategies of stakeholders, in the perspective of a social demand of contested landscapes (Luginbuhl, 2001). The question of uses particularly the access to the superior strata of the vertical city has primarily been built on Lefebvre's "right to the city" theoretical framework, critically interrogating property, accessibility and control of spaces at heights (Ayoub, 2009; Graham, 2011; Graham and Hewitt, 2013). The latter approach progressively led researchers to investigate the issues of concentration, segregation and social fragmentation in their vertical dimension (Cartier, 1999; Harris, 2014; Charney and Rosen, 2014). The value attributed to height then becomes decisive for developers as for populations and local authorities, as well from a monetary point of view as from a symbolical one (Han et al., 2005; Moon et al., 2010).

In India very few cities are experiencing vertical growth because the prospective global cities in India face a major problem in attracting local or international investment in infrastructural facilities. The problem is that of scarcity of land within the central city and other prime locations wherein such facilities are in high demand. With land becoming scarce and expensive, particularly in big cities, developers and builders have no alternative but to build up and consequently high-rise buildings are beginning to appear in large numbers in India cities. Moreover, the agencies like World Bank, USAID etc. have recommended that the Floor Space Index (FSI) in the central areas of the city should be increased so that multi-storied structures can come up, providing space for business houses, commercial activities and high income residential units. The policy of giving

permission for vertical growth at a high price or selling of extra-FSI in central and business districts has been welcomed by many local bodies also as an easy way of generating resources for infrastructural development (Kundu, 2008).

## Objectives and Methodology

The study examines the idea of vertical urbanization in India, particularly the development of the high-rise buildings in cities. The information is obtained from The Skyscraper Center database, confirmed in numerous studies on individual buildings. The analyzed data include building's height and function, and venue of its construction. The minimal height of the high-rise building is considered 50 meters in this paper. The analyses focused on the time span from 1990 to 2020. Due to the locations of buildings with a height of over 50 meters, the analyses included 445 buildings constructed in or designed for more than 13 cities in India. It is worthwhile to point out here that cities with more than 2 buildings having height over 50 meters are taken only for analysis. Apart from the Mumbai, other Indian cities did not experience the development of high rise building before 1990s so time span is confined within 30 years period i.e. 1990 to 2020. Since high rise buildings are spread across the various Indian cities, so to know whether the high rise buildings are developing only in state capitals or they are being constructed beyond capital cities, a hypothesis is formulated in this context. The null hypothesis is that there is no difference of average height of high rise building across the cities. Cities are categorized into two major groups' i.e. state capital cities and cities located immediate outside and far of the capital city. To test hypothesis the Mann-Whitney U test is used.

$$U \text{ test statistic}^2 = \sum r - (nr * (nr+1)/2)) \dots \dots \dots (I)$$

State Capital cities include Mumbai, Bangalore, Kolkata, Chennai Hyderabad and Lucknow. Other cities include Pune, Thane, Noida, Agra, Gurugram, Kochi and Vrindavan.

The first part analyzes the high-rise buildings among the Indian cities. Second part shades light on development of high-rise building in Mumbai as case study to show evolving urban symbolic landscapes after 1990s. Thereafter conclusion is drawn based on synthesis of above data analysis. New Delhi is not taken for the analysis since the New Delhi skyline has remained unchanged from November 1971, when a ban on the construction of such high-rise buildings was imposed by the Central government. The lifting of the ban announced recently in 2014.

## High Rise Buildings in Indian Cities

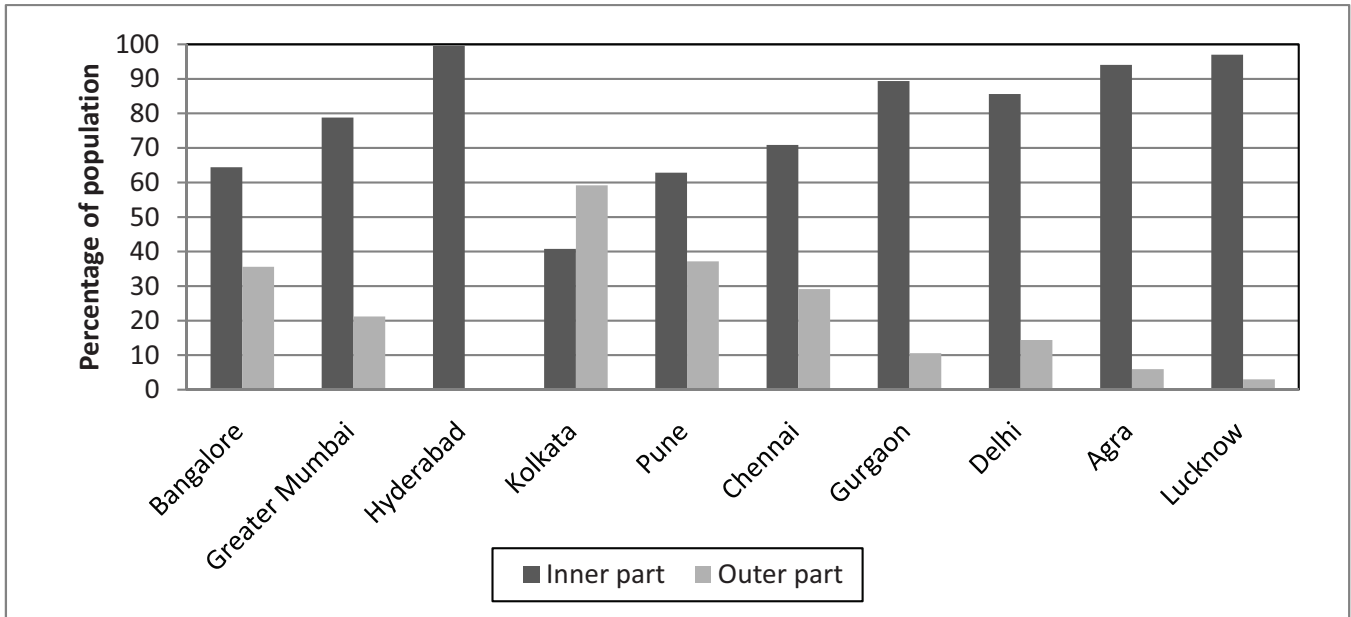
Indian cities are experiencing rapid growth of high-rise building, however, such growth of high rise buildings are not evident across all the cities in the country. Very few cities are experiencing such rapid development of high-rise building across India. One of the major reasons for rapid growth of high-rise buildings is the higher population growth, immigration and demand of housing in the cities. The following Indian cities have higher population share both inner and outer parts<sup>3</sup>.

An overview of the figure 1 reveals that all (except Kolkata) the above Indian cities have higher population share in their inner part compare to their outer part. It is clear that these cities hold large number population both inner and outer part and that makes higher population density in these cities. Therefore high-rise housing construction has begun both in the inner and outer part of these cities since 1990s. However the growth of skyscraper construction is a very recent phenomenon in these cities. In fact, Mumbai is the only city where more than 50 meters building height exists long before 1990s. Now high-rise buildings are rapidly developing across the different cities in India. Figure 2 shows the Indian cities having 100 meter height high-rise buildings.

<sup>3</sup>First, the observations are sorted in ascending order in respect of the variable and their ranks (R) are assigned (smallest value assigned rank 1, second rank 2 and so on). The second step involves sorting the observations' rank scores according to the sample or group to which they belong. The rank scores are summed for these two groups of observations and the smaller total is designated  $\sum r$ . The value of this quantity is inserted into the equation for the test statistic together with  $nr$  – the number of observations in the group that provides  $\sum r$ .

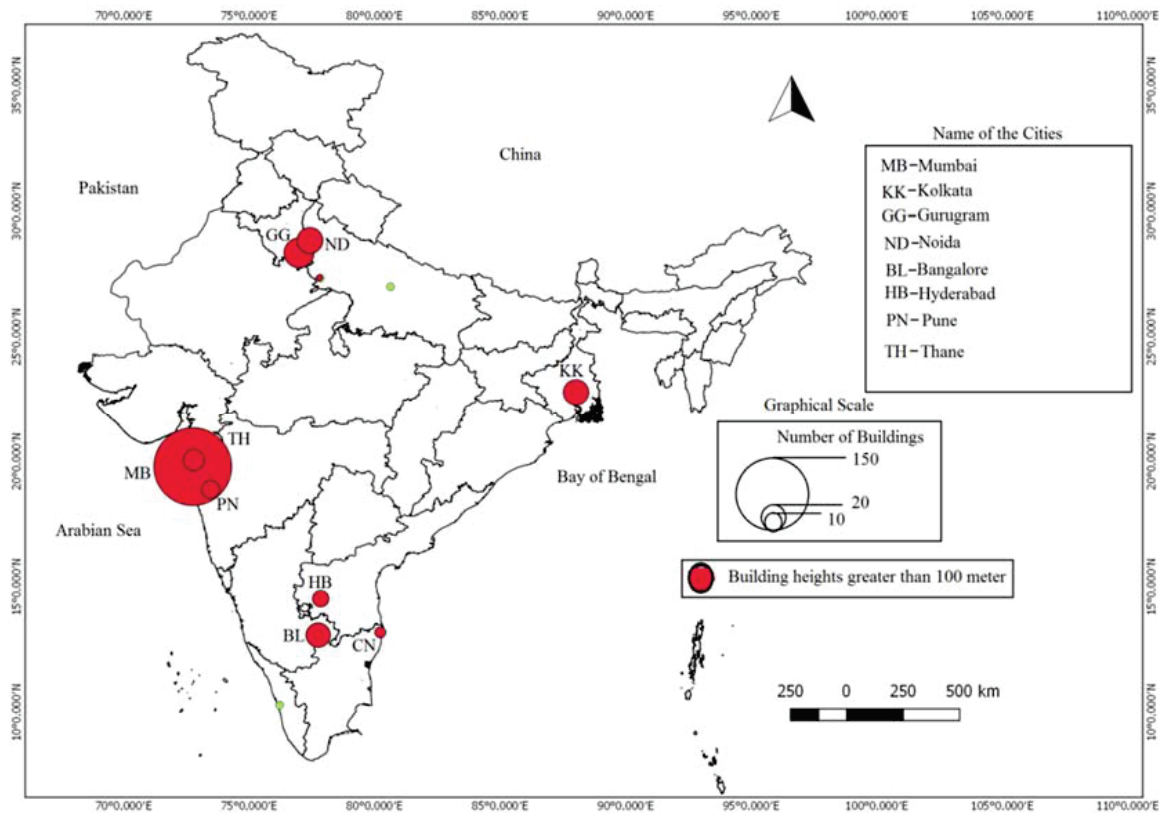
<sup>4</sup>To understand the population share of the inner and outer part of cities, I used urban agglomeration and municipal corporation entity given by census of India, as outer and inner part of the city respectively.

**Figure 1: Population Share between Inner and Outer Part of the Cities**



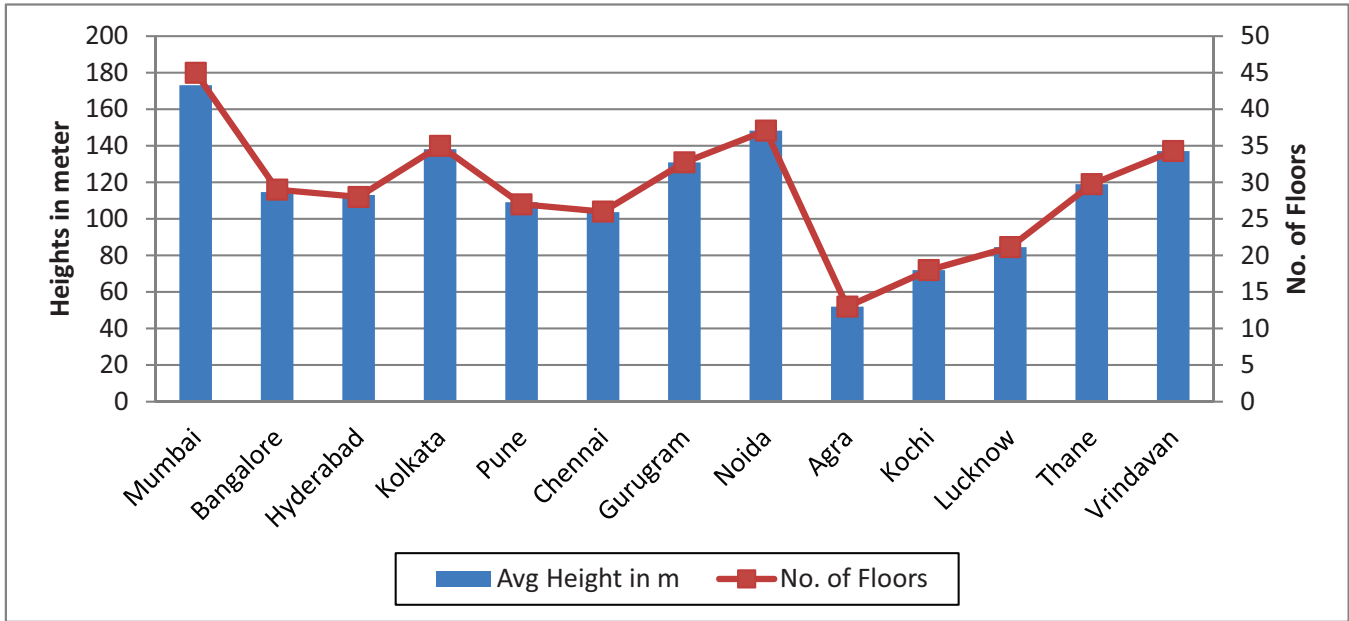
Source: Census of India, 2011 .

**Figure 2: Indian Cities having 100 Meter Height High-Rise Buildings**



Source: The Skyscraper Center Database, 2020.

**Figure 3: High-Rise Building Average Height and Floors in Indian Cities**



Source: The Skyscraper Center Database, 2020.

Out of 13 selected cities, 9 cities have more than two 100 meter height buildings. These cities are located across the India. However figure 3 reveals more on the average height and floor of the high-rise buildings in Indian cities. The figure 3 reveals that Mumbai occupies the first position in terms of average height of high-rise building and number of floors followed by Noida and Kolkata. It is also imperative to look at the composition of Indian cities where high-rise buildings are developing rapidly. Apart from five mega-cities namely Mumbai, Bangalore, Hyderabad, Kolkata and Chennai, high-rise buildings are also developing in cities like Pune, Agra, Noida, Gurugram, and Vrindavan etc. Although some of the cities are actually satellite towns like Noida and Gurugram

located close Delhi. While some of the cities are comes under metropolitan region like Thane in Greater Mumbai urban agglomeration.

The Null Hypothesis states that there is no difference of height of high rise building between state capital and other city should be accepted since there is an extremely high probability of having obtained the test statistic by chance; high rise buildings are developed both at state capital and cities located immediate and beyond the capital city of the state. Therefore real-estate growth is not confined only in the state capitals but it also spread across the different city. It is evident that high-rise buildings are rapidly growing in number only in three types of cities: within megacities, cities close

**Table 1: Statistical Measure Testing Relationship between State Capital City and Non-Capital City**

Statistical Measure	Value
U Statistic	23*

Source: Calculated by author, 2020, p value not significant at 0.05% level

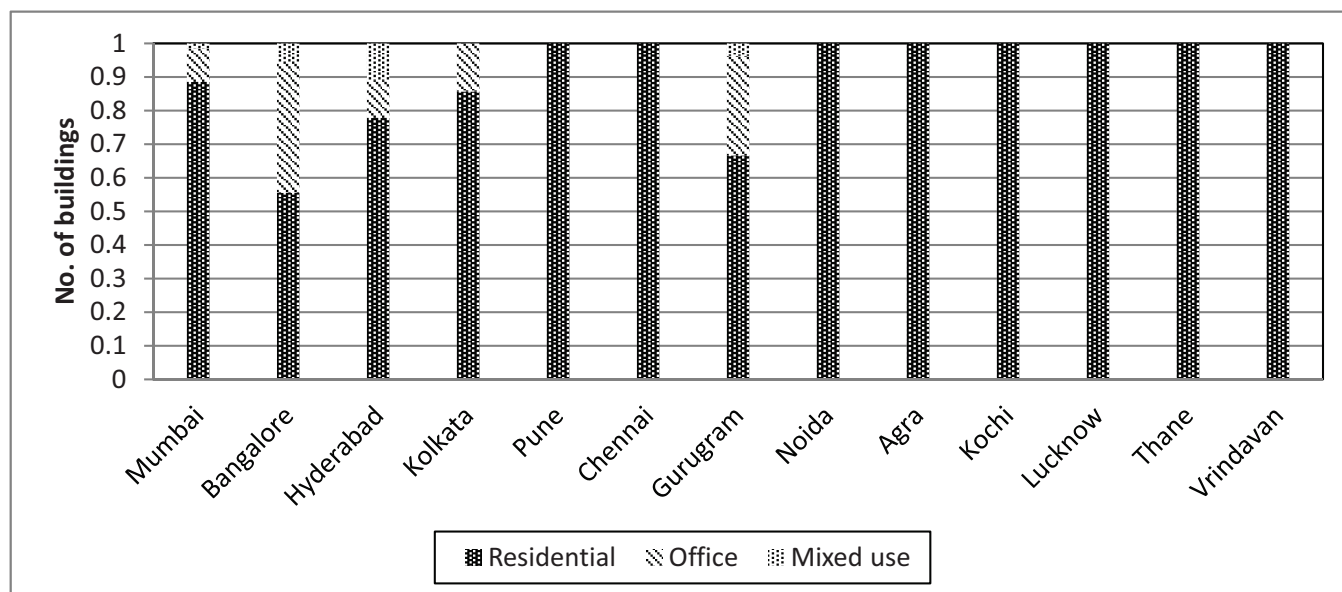
Note: \* tabulated value 36 at 5% level of significance

megacities or satellite towns and cities which are located within the megacity region<sup>4</sup>. It is worthwhile to look at the functions of these high-rise buildings in these cities. It is argued that earlier high-rise buildings are developed at the city center for commercial purposes but now the scenario has changed a lot. Figure 4 shows the functions of the high-rise buildings across the different cities in India. It reveals that the offices are located within the core cities like Mumbai, Bangalore, Hyderabad, and Kolkata while high-rise developed at the satellite towns or urban clusters located within megacity region are mostly residential in nature.

The purpose of the high-rise building development in the outer part of the city (administratively rural in nature) is to provide house at cheaper rate. However, lack of infrastructure to these residential buildings is a major problems reported, since most of these high-rise buildings are constructed on the agricultural fields. On the other hand high-rise buildings within the city are constructed on the old mills or blight areas for both mixed use as well as residential purposes. Gurugram is one of the cities

located within the megacity region and has large number of high-rise residential and office buildings. On the other hand, only high-rise buildings are constructed for residential purpose in Lucknow, capital city of Uttar Pradesh. The significant factor for this trend is the improvements in structural reforms and the more liberalized Foreign Direct Investment (FDI) regime. The global capital flow into Indian real estate in 2016 stood at \$5.7 billion (WIR, 2016). India's Tier-I cities moved up to the 36th rank in JLL's 2016 bi-annual Global Real Estate Transparency Index (JLL, 2016). It suggests that increased transparency brings higher investments into such real estate markets. The real estate market in India is expected to touch US\$ 180 billion by 2020. Although it is reported that shadow banks have fuelled to lending real estate. The Indian real estate sector high growth in recent times is not only due to the rise in demand for office space but also rise in residential space (IBEF, 2017). Mainly tier I cities are emerging as major real estate market in India. The next section will focus on the case of Mumbai to get an idea about the differences in high-rise building development across the various cities.

**Figure 4: Functions of High-Rise Buildings in Indian Cities**



Source: *The Skyscraper Center Database, 2020.*



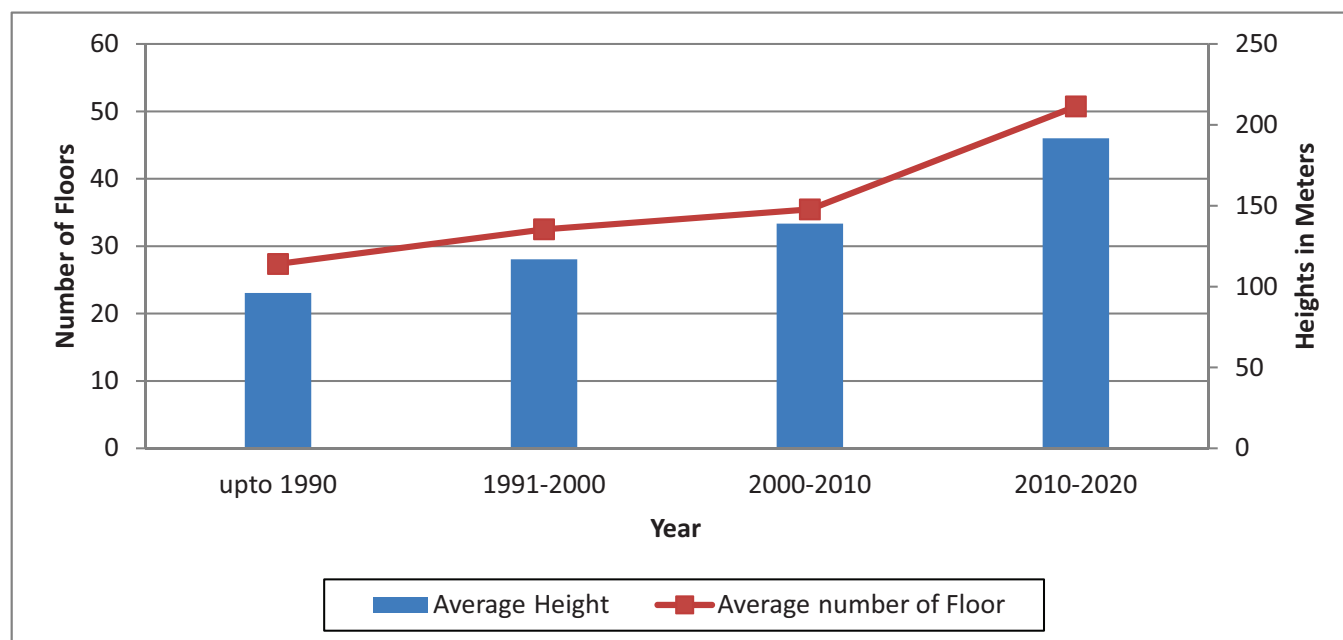
## Case of High-Rise Buildings in Mumbai

The World Bank recent report on 'Doing Business 2020', India was ranked 27 out of 190 countries for Construction Permits. This is based on the performance of Municipal Corporations of Delhi and Mumbai. World Bank has done the assessment (ranking) on the basis of 4 parameters which include number of procedures involved in plan approvals and issuance of completion certificate, time taken for entire cycle of approvals, cost involved in building plan approvals and obtaining NOCs and Building Quality Index. Mumbai is the financial hub of India and one of the largest cities in the country. Therefore demand of high-rise buildings for office and residential purpose are enormous. Figure 5 shows the number of high-rise building constructed more than thirty years period in Mumbai.

It is evident from the figure 5 that there is continuous increase in the number of high-rise

buildings over the thirty years. One of the significant reasons of such growth of high-rise building is the results of some measures taken by the municipal corporation. The Municipal Corporation of Greater Mumbai has suggested that the minimum height for a building to fall under the high-rise category be increased to 32 metres from 24 metres earlier. Apart from this, an expert committee appointed by the state government has recommended that the civic chief is to be made the sanctioning authority for buildings up to a height of 120 metres, or about 40 floors. Urban planning experts said these moves will help simplify and expedite approvals for real estate developments across the city. Moreover, the Mumbai Development Plan 2034 approved by the Maharashtra government increased the floor space index<sup>5</sup>, or the extent of development allowed on a piece of land, for both commercial and residential buildings, according to officials of the Brihanmumbai Municipal Corporation's town planning department.

**Figure 5: Trend of High-Rise Buildings Height and Number of Floors in Mumbai**



*Source: The Skyscraper Center Database, 2020.*



**Table 2: Proposed Floor Space Index (FSI) of Mumbai**

FSI	2018		Before 2018	
	Residential	Commercial	Residential	Commercial
Mumbai	3.0*	5.0	1.3	31.33
Mumbai Suburb	2.5	5.0	2.0	02.50

Source: Mumbai Development Plan 2034

Note: \*This is the maximum FSI figure permissible at Island city. It varies with road width in different places in the island city.

However, FSI is not homogeneous to all the places in Mumbai. As it is evident in the above table that FSI differs in terms of building functions as well as in suburbs and core area of the city. Furthermore, it differs in the slum area also for example; FSI should remain three if the access road is 9 metres or less than 13 metres. FSI will be four if access road is greater than 13 metres. These steps made easy for the construction of high-rise building in Mumbai. In fact, it's reported in the news that many developers wanted higher FSI for all areas in Mumbai instead of selectively increasing FSI for slum rehabilitation, redevelopment of hotels or IT parks. Therefore such regulatory measures assisted further for construction of high-rise buildings in the city.

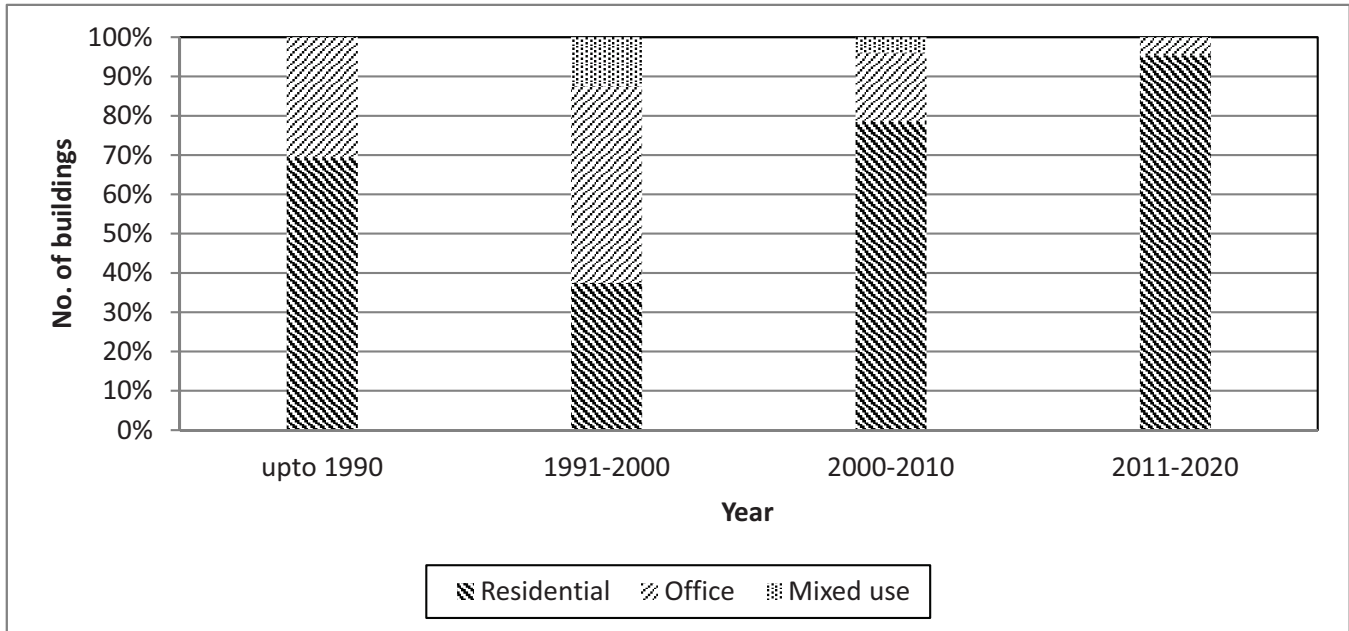
However Residential real estate in Mumbai Metropolitan Region (MMR) faced a difficult year with sales declining by 14% in 2018 and by 5% in 2019. While sales have declined across markets in 2019, the extent of decline was lower in the affordable and mid segment markets of peripheral Suburbs and Thane. The Indian economy is going through a slowdown, with GDP growth dropping to a 6-year low in the September quarter. The economic slowdown and the resultant job losses, has affected the homebuyer sentiments at large. The homebuyer preferences and purchase behaviour too has changed. Homebuyers have become risk averse with many wanting to purchase only in an Occupancy Certificate (OC) ready project and are ready to wait for the project to receive the same. The ones willing to purchase an under construction

apartment are taking longer to close the deals. A few years back, homebuyers took 3-4 visits over a period of 1 month to decide on a property. Now due to the availability of several options in the market, they are taking 10-12 visits over a period of 3-4 months to decide on the purchase (Knight Frank, 2019).

As noted earlier, that function of the high-rise building is important barometer for an economically vibrant city. Mumbai is financial capital of India so it is expected that demand for commercial and residential space will be high. However longitudinal data clearly shows how urban space of Mumbai has changed. Figure 6 shows the changing dominant functions of high-rise buildings.

It is apparent from the figure 6 that from 1991 to 2000, high-rise buildings developed in Mumbai produced more office space rather than residential space. However the scenario has changed for last 20 years. Now more residential spaces are developing in the high-rise buildings rather than commercial or mixed use space. This indicates that there is a high demand of residential space. So the average number of floors in Mumbai has increased from 30 to 50. This brings the new era of vertical urbanization in India in a very miniscule form but over the time it will be dominant in nature. However, if the proper neighbourhood plans are not made based on height difference of high-rise buildings to meet the infrastructural demand it will be challenging.

**Figure 6: Functions of High-Rise Buildings in Mumbai**



Source: *The Skyscraper Center Database, 2020.*

## Conclusion

This paper made an attempt to analyze the high-rise buildings and their use across the 13 Indian cities. It is evident from the analysis that high-rise building in India are rapidly growing mainly in three types of cities include megacities, big satellite towns and cities located within the megacity region. Real estate developers are not confined their projects only in the capitals of the state rather they are

presence can be observed across the different cities in India. The average height of the high-rise buildings in the cities is ranging from 50 meter to almost 200 meter. Moreover, the high-rise buildings across the Indian cities are producing more exclusive residential space than commercial or mixed use space. The case of Mumbai helps to identify the planning and regulatory factors that accelerate the production of high-rise buildings and their functions as well as consumers behaviour.

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## ROUND & ABOUT

### **Slow Cities Movement.**

Hindustan Times contained an editorial on the above topic in its January 17, 2020 issue. A chief characteristic of city life is its frenetic pace. Everything is fast in cities which offers comfort to some sections, while many face various problems like congested living, inequality and poverty.

Problems of cities are many and some are defying solutions. TISS, Mumbai and University College of London in a joint article have argued that slower cities can help to reduce the glaring inequalities in the developing world. They cite the example of 'Cittaslow' the Italian slow cities initiative which have exhaustive criteria of about 54 items inter alia covering all the key aspects of city. The idea is that countries must make urbanism work in their specific contexts, rather than blindly following western model. The word 'slow' is taken from Slow Food Movement focusing on regional cuisines, local food and traditional methods. Having its origin in 1999 in Italy, the Slow City Movement has about 141 Cittaslows in 23 countries. The article suggests trying the model in India to ensure that we build cities for people, instead of the other way round, so as to find a solution to the endemic problem of inequality and poverty.

(Source: Hindustan Times, 17 January, 2020)

### **World Water Day celebrated on 22<sup>nd</sup> March, 2020.**

The United Nations wing UN-Water is the convener of World Water Day, which is celebrated every year on 22<sup>nd</sup> March. The theme for 2020 is "Water and Climate Change". The World Water Day celebrates water and raises awareness of the 2.2 billion people living without access to safe water. It is about taking action to tackle the global water crisis. A core focus of the Day is to support the achievement of Sustainable Development Goal 6: Water and Sanitation for all by 2030. The UN Report on World Water Day, inter alia mentions that India has now shifted its focus to providing piped water to every home by 2024, it has discussed Government of India's efforts in this direction and problems faced in implementation.

(Source: UN Website of World Water Day, Financial Express, 19 March, 2020).

### **Atal Mission for Rejuvenation and Urban Transformation (AMRUT) extended by two years.**

AMRUT was launched on 25th June, 2015. The Ministry of Housing and Urban Affairs have published the progress up to December 2019. The Mission has five thrust areas which include water connections to household water supply project, sewerage and septage management, parks and green spaces and LED street lights.

The data shows that over the last five years 46% of water connections and 28% of sewer connections have been achieved. The Ministry states that very big projects in water and sewerage have been undertaken which would take several years to complete. Hence, an extension of 2 years i.e up to March 2022 has been given to the Mission).

(Source: Ministry website and Nidhi Sharma ET Bureau, 18 December, 2019).

### **Urban Governance – 10 point Guarantee Card.**

The Urban World does not comment on political matters, however notes with satisfaction that perhaps it was the first time in a State Assembly elections that political parties focused on urban related issues promising them various civic amenities in their manifestoes. This happened in January 2020 elections to Delhi Assembly.

The incumbent party which returned to power had declared '10 point Guarantee Card' containing civic amenity premises. We record that such a concerted focus on better urban management and civic governance is a solitary development to address functions of cities and city dwellers.

(Source: Media Reports)

### **National Girl Child Day celebrated on 24 January, 2020.**

The National Girl Child Day was started by the Ministry of Women and Child Development, Government of India in 2018. The purpose of the Day is to spread awareness among the people about the inequalities girls face in India.

On this occasion, the Ministry announced to set up ten Chairs (dedicated study forums) in different fields with an aim to carry out research activities to encourage women. The main objectives of the initiative is to inspire woman to pursue higher education and to achieve excellence in their area of work.

The Chairs set proposed by UGC and approved by the Ministry are as follows :

Sr. No.	Subject	Name of the Chair
1.	Administration	Devi Ahilyabai Holkar
2.	Literature	Mahadevi Varma
3.	Freedom Fighter (North, East)	Rani Gaidinilu
4.	Medicine & Health	Anandibai Gopalrao Joshi
5.	Performing Art	Madurai Shanmukhavadiyu Subbulakshmi
6.	Forest / Wild life Conservation	Amrita Devi (Beniwal)
7.	Mathematics	Lilavati
8.	Science	Komala Sohanic
9.	Poetry & Mysticism	Lal Dad
10.	Educational Reforms	Hansa Mehta

Academic functions of the Chairs will be to engage in research and, in turn, contribute to the advancement of knowledge in the area of the study, strengthen the role of university / academics in public policy making and to design and execute short term capacity building programmes for teachers in higher education focused towards the designated discipline of the Chair. The other academic functions will be to provide a forum for inter-university / Inter – collegiate, Post Graduate and Research Level dialogues, discussions, meetings, seminars / summer and winter schools, publish articles / research papers / reports / books / programmes and participate in teachings and Ph.D programmes of the Department or school in which it is located.

Various educational, social and cultural programmes were held across India.

(Source: Ministry Website, Media Reports)



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